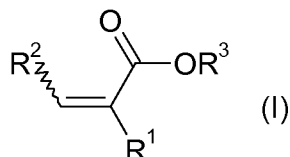


1. An insecticide or repellent composition for application to a textile material or plastics material which composition comprises a mixture including

- 5 a) at least one insecticide and/or at least one repellent as component A, and  
 b1) at least one acrylic binder as component B1 obtainable by emulsion polymerisation of the following components:  
 b1a) n-butyl acrylate as component B1A,  
 b1b) at least one monomer of formula I as component B1B



10

wherein

$R^1$ ,  $R^2$  and  $R^3$  are independently selected from  $C_1$ - to  $C_{10}$ -alkyl which may be linear or branched; substituted or unsubstituted aryl;

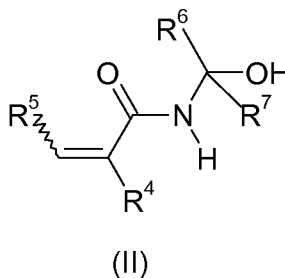
15

$R^1$  and  $R^2$  may further be H;

except of  $R^3 = n$ -butyl, when  $R^1$  and  $R^2$  are H;

b1c) at least one monomer of formula II as component B1C

20



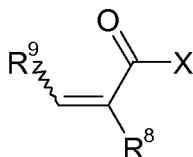
wherein

$R^4$ ,  $R^5$ ,  $R^6$  and  $R^7$  are independently selected from the group consisting of H,  $C_1$ - to  $C_{10}$ -alkyl which may be linear or branched; substituted or unsubstituted aryl;

25

b1d) optionally at least one monomer of formula III as component B1D

- 2 -

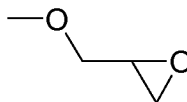


(III)

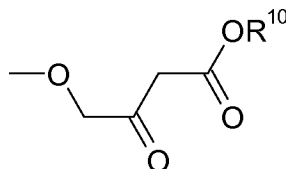
wherein

$R^8$  and  $R^9$  are independently selected from the group consisting of H,  $C_1$ - to  $C_{10}$ -alkyl which may be linear or branched; substituted or unsubstituted aryl;

X is selected from the group consisting of H, OH,  $NH_2$ ,  $OR^{11}OH$ , glycidyl, hydroxypropyl,



groups of the formula



wherein

$R^{10}$  is selected from the group consisting of  $C_1$ - to  $C_{10}$ -alkyl which may be branched or linear; substituted or unsubstituted aryl;

$R^{11}$  is selected from the group consisting of  $C_1$ - to  $C_{10}$ -alkylene; substituted or unsubstituted arylenes;

b1e) optionally further monomers which are copolymerizable with the monomers mentioned above selected from

b1e1) polar monomers as component B1E1;  
and/or

b1e2) non polar monomers as component B1E2.

2. The insecticide or repellent composition as claimed in claim 1, wherein the acrylic binder is obtainable by emulsion polymerization of the following components:

b1a) 10 to 90% by weight, preferably 15 to 80% by weight, more preferably 20 to 70% by weight of component B1A;

- 5 b1b) 10 to 90% by weight, preferably 12 to 85% by weight, more preferably 15 to 65% by weight of component B1B;  
 b1c) 1 to 5 % by weight of component B1C;  
 b1d) 0 to 5 % by weight, preferably 1 to 4 % by weight, more preferably 0.2 to 3% by weight of component B1D;  
 b1e) further monomers which are copolymerizable with the monomers mentioned above selected from  
 b1e1) 0 to 30 % by weight, preferably 0 to 25 % by weight, more preferably 5 to 20 % by weight of component B1E1; and/or  
 10 b1e2) 0 to 40 % by weight, preferably 0 to 30 % by weight, more preferably 5 to 20 % by weight of component B1E2;

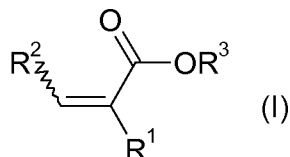
15 wherein the sum of the components B1A, B1B, B1C and optionally B1D and B1E is 100 % by weight.

3. The insecticide or repellent composition as claimed in claim 1, wherein the acrylic binder is obtainable by emulsion polymerization of the following components:
- 20 b1a) 30 to 85% by weight of component B1A;  
 b1b) 10 to 90% by weight, preferably 12 to 85% by weight, more preferably 15 to 65% by weight of component B1B;  
 b1c) 1 to 5 % by weight of component B1C;  
 b1d) 0 to 5 % by weight, preferably 1 to 4 % by weight, more preferably 0.2 to 3% by weight of component B1D;  
 25 b1e) further monomers which are copolymerizable with the monomers mentioned above selected from  
 b1e1) 0 to 30 % by weight, preferably 0 to 25 % by weight, more preferably 5 to 20 % by weight of component B1E1; and/or  
 b1e2) 0 to 40 % by weight, preferably 0 to 30 % by weight, more preferably 5 to 20 % by weight of component B1E2;  
 30

wherein the sum of the components B1A, B1B, B1C and optionally B1D and B1E is 100 % by weight.

- 35 4. An insecticide or repellent composition for application to a textile material or plastics material which composition comprises a mixture including  
 a) at least one insecticide and/or repellent as component A, and  
 b) at least one acrylic binder as component B1 obtainable by emulsion polymerization of the following components:  
 40 b1a) 30 to 85 % by weight of n-butylacrylate as component B1A;

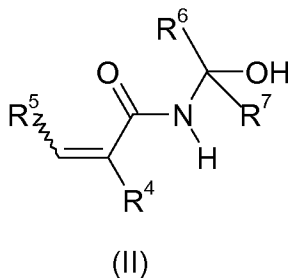
b2b) 0 to 65 % by weight of at least one monomer of formula I as component B1B



wherein

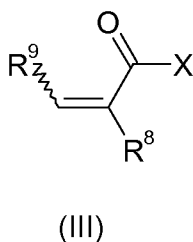
5  $\text{R}^1$  is H or methyl,  $\text{R}^2$  is H and  $\text{R}^3$  is methyl, ethyl, or 2-ethylhexyl, as component B1B, most preferably component B1B is 2-ethylhexylacrylate, methylacrylate, methylmethacrylate or ethylacrylate;

b1c) 1 to 5 % by weight of at least one monomer of formula II

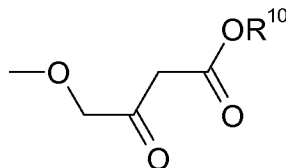


10 wherein  $\text{R}^4$  is H or methyl,  $\text{R}^5$ ,  $\text{R}^6$  and  $\text{R}^7$  each are H as component B1C;

b1d) 1 to 10 % by weight, preferably 1 to 7 % by weight, more preferably 2 to 5 % by weight of at least one monomer of formula III



15 wherein  $\text{R}^8$  and  $\text{R}^9$  are H and X is H, OH,  $\text{NH}_2$ ,  $\text{OR}^{11}\text{OH}$ , glycidyl or a group of the formula



wherein

20  $\text{R}^{10}$  is selected from the group consisting of  $\text{C}_1$ - to  $\text{C}_{10}$ -alkyl which may be branched or linear, for example methyl, ethyl, n-propyl, i-propyl, n-butyl, i-butyl, sec-butyl, tert-butyl, n-pentyl, i-pentyl, sec-pentyl, neo-pentyl, 1,2-dimethylpropyl, i-amyl, n-hexyl, i-hexyl, sec-hexyl, n-heptyl, n-octyl, 2-ethylhexyl, n-nonyl, n-decyl;

preferably C<sub>1</sub>- to C<sub>4</sub>-alkyl, which may be branched or linear, for example methyl, ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl and tert-butyl; substituted or unsubstituted aryl, preferably substituted or unsubstituted C<sub>6</sub>- to C<sub>10</sub>-aryl, more preferably substituted or unsubstituted C<sub>6</sub>-aryl, for example phenyl or tolyl;

5

R<sup>11</sup> is selected from the group consisting of C<sub>1</sub>- to C<sub>10</sub>-alkylene, for example methylene, ethylene, propylene, butylene, pentylene, hexylene, heptylene, octylene, nonylene, decylene; preferably C<sub>1</sub>- to C<sub>4</sub>-alkylene, for example methylene, ethylene, propylene, butylenes; substituted or unsubstituted arylenes, preferably substituted or unsubstituted C<sub>6</sub>- to C<sub>10</sub>-arylene, more preferably substituted or unsubstituted C<sub>6</sub>-arylene, for example phenylene;

10

as component B1D, most preferably X is acetoacetyl;

15

b1e) further monomers which are copolymerizable with the monomers mentioned above selected from

b1e1) 0 to 30 % by weight, preferably 0 to 25 % by weight, more preferably 5 to 20 % by weight of component B1E1, preferably (meth)acrylic nitrile and/or methyl(meth)acrylate;

20

and/or

b1e2) 0 to 40 % by weight, preferably 0 to 30 % by weight, more preferably 5 to 20 % by weight of component B1E2, preferably styrene and/or *α*-methylstyrene;

25

wherein the sum of components B1A, B1B, B1C and optionally B1D and B1E is 100 % by weight.

5. An insecticide or repellent composition as claimed in claim 4, wherein component B1 is obtainable by emulsion polymerization of the following components:

30

b1a) 81.0 % by weight of n-butylacrylate as component B1A;

b1c) 2.0 % by weight of N-methylol methacrylamide as component B1C;

b1d) 1.0 % by weight of acrylic acid as component B1D;

b1e1) 16 % by weight of acrylic nitril as component B1E1.

35

6. The insecticide or repellent composition as claimed in any of claims 1 to 5, wherein the insecticide is selected from pyrethroid compounds, preferably

Etofenprox: 2-(4-ethoxyphenyl)-2-methylpropyl-3-phenoxybenzyl ether,

Chlorfenapyr: 4-bromo-2-(4-chlorophenyl)-1-ethoxymethyl-5-(trifluoromethyl)-pyrrole-3-carbonitrile,

40

Fenvalerate: (RS)- $\alpha$ -cyano-3-phenoxybenzyl (RS)-2-(4-chlorophenyl)-3 methylbutyrate,

- Esfenvalerate: (S)-alpha-cyano-3-phenoxybenzyl (S)-2-(4-chlorophenyl)-3-methylbutyrate,
- Fenpropathrin: (RS)-alpha-cyano-3-phenoxybenzyl 2,2,3,3-tetramethylcyclopropane-carboxylate,
- 5 Cypermethrin: (RS)-alpha-cyano-3-phenoxybenzyl (1RS)-cis, trans-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate,  
alpha-Cypermethrin: racemate comprising the (S)- $\alpha$ -(1R) and (R)- $\alpha$ -(1S) diastereomers,
- 10 Permethrin: 3-phenoxybenzyl (1RS)-cis, trans-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate,
- Cyhalothrin: (RS)-alpha-cyano-3-phenoxybenzyl (Z)-(1RS)-cis-3-(2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2-dimethylcyclopropanecarboxylate, lambda-cyhalothrin,
- Deltamethrin: (S)-alpha-cyano-3-phenoxybenzyl (1R)-cis-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylate,
- 15 Cycloprothrin: (RS)-alpha-cyano-3-phenoxybenzyl (RS)-2,2-dichloro-1-(4-ethoxyphenyl)cyclopropanecarboxylate,
- Fluvalinate: alpha-cyano-3-phenoxybenzyl N-(2-chloro-alpha, alpha, alpha, alpha-trifluoro-p-tolyl)-D-valinate,
- 20 Bifenthrin: (2-methylbiphenyl-3-ylmethyl)O(Z)-(1RS)-cis-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylate,  
2-methyl-2-(4-bromodifluoromethoxyphenyl)propyl (3-phenoxybenzyl)ether,
- Tralomethrin: (S)-alpha-cyano-3-phenoxybenzyl (1R-cis)3((1'RS)(1', 2', 2', 2'-tetrabromoethyl))-2,2-dimethylcyclopropanecarboxylate,
- 25 Silafluofen: 4-ethoxyphenyl(3-(4-fluoro-3-phenoxyphenyl)propyl)dimethylsilane,  
D-fenothrin: 3-phenoxybenzyl (1R)-cis, trans)-chrysanthemate,
- Cyphenothrin: (RS)-alpha-cyano-3-phenoxybenzyl (1R-cis, trans)-chrysanthemate, D-resmethrin: 5-benzyl-3-furylmethyl (1R-cis, trans)-chrysanthemate,
- 30 Acrinathrin: (S)-alpha-cyano-3-phenoxybenzyl (1R-cis(Z))-(2,2-dimethyl-3-(oxo-3-(1,1,1,3,3,3-hexafluoropropoxy)propenyl)cyclopropanecarboxylate,
- Cyfluthrin: (RS)-alpha-cyano-4-fluoro-3-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate,
- Tefluthrin: 2,3,5,6-tetrafluoro-4-methylbenzyl (1RS-cis (Z))-3-(2-chloro-3,3,3-trifluoro-prop-1-enyl)-2,2-dimethylcyclopropanecarboxylate,
- 35 Transfluthrin: 2,3,5,6-tetrafluorobenzyl (1R-trans)-3-(2,2-dichlorovinyl)-2,2-dimethyl-cyclopropanecarboxylate,
- Tetramethrin: 3,4,5,6-tetrahydrophthalimidomethyl (1RS)-cis, trans-chrysanthemate,
- 40 Allethrin: (RS)-3-allyl-2-methyl-4-oxocyclopent-2-enyl (1RS)-cis, trans-chrysanthemate,

- Prallethrin: (S)-2-methyl-4-oxo-3-(2-propynyl)cyclopent-2-enyl (1R)-cis, trans-chrysanthemate,
- Emperthrin: (RS)-1-ethynyl-2-methyl-2-pentenyl (1R)-cis,trans-chrysanthemate,
- Imiprothrin: 2,5-dioxo-3-(prop-2-ynyl)imidazolidin-1-ylmethyl (1R)-cis, trans-2,2-dimethyl-3-(2-methyl-1-propenyl)-cyclopropanecarboxylate,
- D-flamethrin: 5-(2-propynyl)-furfuryl (1R)-cis, trans-chrysanthemate, and 5-(2-propynyl)furfuryl 2,2,3,3-tetramethylcyclopropanecarboxylate;
- Pyriproxyfen: 4-phenoxyphenyl (RS)-2-(2-pyridyloxy)propyl ether; pyrethrum;
- d-d, trans-cyphenothrin: (RS)- $\alpha$ -cyano-3-phenoxybenzyl (1RS,3RS;1RS,3SR)-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate; DDT;
- Carbamate compounds, preferably
- Alanycarb: S-methyl-N[[N-methyl-N-[N-benzyl-N(2-ethoxy-carbonyl)ethyl]aminothio]carbamoylethio]thioacetimidate,
- Bendiocarb: 2,2-dimethyl-1,3-benzodioxol-4-yl-methylcarbamate), Carbaryl(1-naphthyl N-methylcarbamate,
- Isoproc carb: 2-(1-methylethyl)phenyl methylcarbamate,
- Carbosulfan: 2,3 dihydro-2,2-dimethyl-7-benzofuranyl[(dibutylamino)thio]methylcarbamate,
- Fenoxycarb: Ethyl[2-(4-phenoxyphenoxy)ethyl]carbamate,
- Indoxacarb: Methyl-7-chloro-2,2,3,4,5-tetrahydro-2-[methoxycarbonyl (-4-trifluoromethoxyphenyl)]
- Propoxur: 2-isopropoxyphenol methylcarbamate,
- Pyrimicarb: 2-dimethylamino-5,6-dimethyl-4-pyrimidinyl-dimethylcarbamate,
- Thiodiocarb: Dimethyl N,N'-(thiobis((methylimino)carbonoyloxy)bisethanimidiodithioate);
- Methomyl: S-methyl N-((methylcarbamoylethio)oxy)thioacetamidate,
- Ethiofencarb: 2-((ethylthio)methyl)phenyl methylcarbamate,
- Fenothiocarb: S-(4-phenoxybutyl)-N,N-dimethyl thiocarbamate,
- Cartap: S,S'-(2,5 dimethylamino)trimethylene)bis (thiocarbamate)hydrochloride,
- Fenobucarb: 2-sec-butylphenylmethyl carbamate,
- XMC: 3,5-dimethylphenyl-methyl carbamate,
- Xylcarb: 3,4-dimethylphenylmethylcarbamate;
- organophosphorous compounds, preferably
- Trichlorfon: Phosphoric acid, (2,2,2-trichloro-1-hydroxyethyl)-, dimethyl ester
- Fenitrothion: O,O-dimethyl O-(4-nitro-m-tolyl)phosphorothioate,
- Diazinon: O,O-diethyl-O-(2-isopropyl-6-methyl-4-pyrimidinyl)phosphorothioate,

- Pyridaphenthion: O-(1,6-dihydro-6-oxo-1-phenylpyrazidin-3-yl) O,O-diethyl phosphorothioate,
- Pirimiphos-Etyl: O,O-diethyl O-(2-(diethylamino)6-methylpyrimidinyl)phosphorothioate, Pirimiphos-Methyl: O-[2-(diethylamino)-6-methyl-4
- 5 pyrimidinyl] O,O-dimethyl phosphorothioate,
- Etrimphos: O-6-ethoxy-2-ethyl-pyrimidin-4-yl-O,O-dimethyl-phosphorothioate,
- Fenthion: O,O-dimethyl-O-[3-methyl-4-(methylthio)phenyl phosphorothioate,
- Phoxim: 2-(diethoxyphosphinothioxyimino)-2-phenylacetone nitrile,
- Chlorpyrifos: O,O-diethyl-O-(3,5,6-trichloro-2-pyridinyl)phosphorothioate,
- 10 Chlorpyriphosmethyl: O,O-dimethyl O-(3,5,6-trichloro-2-pyridinyl)phosphorothioate,
- Cyanophos: O,O-dimethyl O-(4 cyanophenyl)phosphorothioate,
- Pyraclofos: (R,S)[4-chlorophenyl]-pyrazol-4-yl]-O-ethyl-S-n-propyl phosphorothioate,
- 15 Acephate: O, S-dimethyl acetylphosphoroamidithioate,
- Azamethiphos: S-(6-chloro-2,3-dihydro-oxo-1,3-oxazolo[4,5-b]pyridine-3-yl)methyl phosphorothioate,
- Malathion: O,O-dimethyl phosphorodithioate ester of diethyl mercaptosuccinate,
- Temephos: (O,O'-(thiodi-4-1-phenylene) O,O,O,O-tetramethyl phosphorodithioate,
- 20 Dimethoate: ((O,O-dimethyl S-(n-methylcarbamoyl)ethyl)phosphorodithioate,
- Formothion: S[2-formylmethylamino]-2-oxoethyl]-O,O-dimethyl phosphorodithioate,
- Phenthoate: O,O-dimethyl S-(alpha-ethoxycarbonylbenzal)-phosphorodithioate;
- Iodofenphos: O-(2,5-dichloro-4-iodophenyl)-O,O-dimethyl-phosphorothioate;
- 25
- Insecticides with a sterilising effect on adult mosquitoes, preferably
- 1-(alpha-(chloro-alpha-cyclopropylbenzylidenamino-oxy)-p-tolyl)-3-(2,6-difluorobenzoyl)urea,
- Diflubenzuron: N-(((3,5-dichloro-4-(1,1,2,2-tetrafluoroethoxy)phenylamino)carbonyl)2,6 difluoro benzamid,
- 30 Triflumuron: 2-Chloro-N-(((4-(trifluoromethoxy)phenyl)-amino-)carbonyl)benzamide, or a triazin, preferably N-cyclopropyl-1,3,5-triazine-2,4,6-triamin; and
- Lambda-cyhalothrine:
- 35  $\alpha$ -cyano-3-phenoxybenzyl-3-(2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2-dimethylcyclopropane carboxylate, as a 1:1 mixture of (Z)-(1R,3R), R-ester and (Z)-(1S,3S), S-ester;
- 40 the repellent is selected from N,N-Diethyl-meta-toluamide (DEET), N,N-diethylphenylacetamide (DEPA), 1-(3-cyclohexan-1-yl-carbonyl)-2-methylpiperine, (2-hydroxymethylcyclohexyl) acetic acid lactone, 2-ethyl-1,3-hexandiol,



- indalone, Methylneodecanamide (MNDA), a pyrethroid not used for insect control, preferably {(+/-)-3-allyl-2-methyl-4-oxocyclopent-2-(+)-enyl-(+)-trans-chrysantemate (Esbiothrin), a repellent derived from or identical with plant extracts, preferably limonene, eugenol, (+)-Eucamalol (1), (-)-1-epi-eucamalol or
- 5 crude plant extracts from plants like Eucalyptus maculata, Vitex rotundifolia, Cymbopogon martinii, Cymbopogon citratus (lemon grass), Cymbopogon nardus (citronella), IR3535 (ethyl butylacetylaminopropionate), icaridin (1-piperidinecarboxylic acid 2-(2-hydroxyethyl)-1-methylpropylester).
- 10 niclosamide as suitable mulloscicide;
- suitable rodenticides of first generation anticoagulant rodenticides and second generation anticoagulant rodenticides selected from the group consisting of warfarin, chlorphacinone, coumatetralyl as first generation anticoagulant rodenticides, and
- 15 flocoumafen, brodifacoum, difenacoum, bromadiolone, difethialone, and bromethalin as second generation anticoagulant rodenticides;
- antifungal agents as fungicides used in the case of athlete's foot selected from the group consisting of clotrimazole: 1-(2-chlorotriyl)imidazole, miconazole: 1-[2-(2,4-dichlorophenyl)-2-[(2,4-dichlorophenyl)methoxy]ethyl]-1H-imidazole, econazole
- 20 4-[2-[(4-chlorophenyl)methoxy]-2-(2,4-dichlorophenyl)-ethyl]-4H-imidazole, tioconazole: 1-[2-[(2-chloro-3-thienyl)methoxy]-2-(2,4-dichlorophenyl)-ethyl]-1H-imidazole, undecylenic acid, terbinafine hydrochloride: N,6,6-trimethyl-N-(naphthalen-4-ylmethyl)hept-2-en-4-yn-1-amine hydrochloride (lamisil topical),
- 25 and tolnaftate: N-methyl-N-(m-tolyl)-1-naphthalen-3-yloxy-thioformamide;
- further fungicides, preferably
- Azoles, preferably selected from Bitertanol, Bromoconazol, Cyproconazol, Difenoconazole, Dinitroconazol, Epoxiconazol, Fenbuconazol, Fluquiconazol,
- 30 Flusilazol, Flutriafol, Hexaconazol, Imazalil, Ipconazol, Metconazol, Myclobutanil, Penconazol, Propiconazol, Prochloraz, Prothioconazol, Simeconazol, Tebuconazol Tetraconazol, Triadimefon, Triadimenol, Triflumizol, and Triticonazol;
- Strobilurines, preferably selected from Azoxystrobin, Dimoxystrobin, Fluoxastrobin, Kresoxim-methyl, Metominostrobin Orysastrobin, Picoxystrobin, Pyraclostrobin, and Trifloxystrobin;
- 35 Acylalanines, preferably selected from Benalaxyl, Metalaxyl, Mefenoxam, Ofurace, and Oxadixyl;
- Aminderivatives, preferably selected from Aldimorph, Dodine, Dodemorph,
- 40 Fenpropimorph, Fenpropidin, Guazatine, Iminoctadine, Spiroxamin, and Tridemorph;

- Anilinopyrimidines, preferably selected from Pyrimethanil, Mepanipyrim, and Cyprodinil;
- Dicarboximides, preferably selected from Iprodion, Myclozolin, Procymidon, and Vinclozolin;
- 5 Cinnamic acid amide and analoges, preferably selected from Dimethomorph, Flumetover, and Flumorph;
- Antibiotics, preferably selected from Cycloheximid, Griseofulvin, Kasugamycin, Natamycin, Polyoxin, and Streptomycin;
- 10 Dithiocarbamates, preferably selected from Ferbam, Nabam, Maneb, Mancozeb, Metam, Metiram, Propineb, Polycarbamat, Thiram, Ziram and Zineb;
- Heterocyclic compounds, preferably selected from Anilazin, Benomyl, Boscalid, Carbendazim, Carboxin, Oxycarboxin, Cyazofamid, Dazomet, Dithianon, Famoxadon, Fenamidon, Fenarimol, Fuberidazol, Flutolanil, Furametpyr, Iso-
- 15 prothiolan, Mepronil, Nuarimol, Picobenzamid, Probenazol, Proquinazid, Pyrifenox, Pyroquilon, Quinoxifen, Silthiofam, Thiabendazol, Thifluzamid, Thiophanat-methyl, Tiadinil, Tricyclazol, and Triforine
- M inorganics;
- Nitrophenylderivatives, preferably selected from Binapacryl, Dinocap, Dinobuton, Nitrophthal-isopropyl;
- 20 Phenylpyrrole Fenpiclonil, and Fludioxonil;
- Sulfonic acid derivatives, preferably selected from Captafol, Captan, Dichlofluanid, Folpet, and Tolyfluanid;
- Further fungicides, preferably selected from Acibenzolar-S-methyl, Benthiavalicarb, Carpropamid, Chlorothalonil, Cyflufenamid, Cymoxanil,
- 25 Dazomet, Diclomezin, Diclocymet, Diclofluanid, Diethofencarb, Edifenphos, Ethaboxam, Fenhexamid, Fentin-Acetat, Fenoxanil, Ferimzone, Fluazinam, Fosetyl, Fosetyl-Aluminium, Phosphorige Säure, Iprovalicarb, Hexachlorbenzol, Metrafenon, Pencycuron, Propamocarb, Phthalid, Toloclofos- methyl, Quintozene, and Zoxamid.
- 30
7. The insecticide or repellent composition as claimed in any of claims 1 to 6, wherein the particle size of the insecticide and/or repellent is from 50 nm to 20  $\mu$ m, preferably 50 nm to 8  $\mu$ m, more preferably 50 nm to 4  $\mu$ m, most preferably 50 nm to 500 nm.
- 35
8. The insecticide or repellent composition as claimed in any of claims 1 to 7, further comprising one or more component selected from water, preservatives, detergents, stabilizers, agents having UV-protecting properties, optical brighteners, spreading agents, anti-migrating agents, foam-forming agents, wetting agents,
- 40 anti-soiling agents, thickeners, further biozides, plasticizers, adhesive agents, fragrance, pigments and dyestuffs.

9. The insecticide or repellent composition as claimed in any of claims 1 to 8, comprising from about 0.001 to 95 % by weight of the insecticide and/or repellent.
10. The insecticide or repellent composition as claimed in any of claims 1 to 9, which  
5 is provided as a kit for impregnation by the end-user or in a local factory.
11. The insecticide or repellent composition as claimed in claim 10 wherein the composition in the kit is adapted for preparing a solution or emulsion by adding water.
- 10 12. An impregnated textile material or plastics material for insect killing and/or repellence of an insect comprising
  - a) at least one insecticide and/or at least one repellent, and
  - b1) at least one acrylic binder as claimed in any of claims 1 to 5.
- 15 13. The impregnated textile material or plastics material as claimed in claim 10 comprising an insecticide and/or repellent as defined in claim 6.
14. The impregnated textile material or plastics material as claimed in claim 12 or 13  
20 further comprising one or more components selected from preservatives, detergents, stabilizers, agents having UV-protecting properties, optical brighteners, spreading agents, anti-migrating agents, foam-forming agents, wetting agents, anti-soiling agents, thickeners, further biocides, plasticizers, adhesive agents, fragrance, pigments and dyestuffs.
- 25 15. The impregnated textile material or plastics material as claimed in any of claims 12 to 14 comprising from 0.001 to 10 % by weight of the weight of the textile material or plastics material of at least one insecticide and/or at least one repellent.
- 30 16. The impregnated textile material or plastics material as claimed in claim 15, comprising
  - a) 0.01 to 10 % by weight, preferably 0.05 to 7 % by weight of the weight of the textile material or plastics material of at least one insecticide and/or at least one repellent, more preferably 0.1 to 6 % by weight of the weight of the textile material or plastics material of a pyrethroid as at least one insecticide and/or at least one repellent, and
  - 35 b1) 0.001 to 10 % by weight, preferably 0.1 to 5 % by weight, more preferably 0.2 to 3 % by weight of the weight of the textile material or plastics material of at least one acrylic binder as claimed in any of claims 1 to 5.
- 40 17. A process for impregnation of a textile material or plastics material comprising the steps

- i) forming an aqueous formulation or a melt, comprising at least one insecticide and/or at least one repellent as defined in claim 6 and at least one acrylic binder as defined in any of claims 1 to 5 and optionally further ingredients;
- 5 ii) applying the aqueous formulation to the textile material or plastics material by
  - iia) passing the textile material or plastics material through the aqueous formulation;
  - or
  - 10 iib) bringing the textile material or plastics material in contact with a roller that is partly or fully dipped into the aqueous formulation and drawing the aqueous formulation to the side of the textile material or plastics material in contact with the roller;
  - or
  - 15 iic) double-side coating of the textile material or plastics material;
  - or
  - iid) spraying the aqueous formulation onto the textile material or plastics material; wherein the spraying is carried out with any suitable device for spraying by hand or automatically, for example with an aerosol can or devices usually used in a factory;
  - 20 or
  - iie) applying the aqueous formulation in form of a foam;
  - or
  - 25 iif) submerging the textile material or plastics material into the aqueous formulation;
  - or
  - iig) brushing the aqueous formulation onto or into the textile material or plastics material;
  - or
  - 30 iih) pouring the aqueous formulation onto the textile material or plastics material;
  - or
  - applying the melt by calendering or with a doctor-blade;
- 35 iii) optionally removing surplus aqueous formulation or surplus melt; and
- iv) drying and/or curing the textile material or plastics material.

- 18. The process as claimed in claim 17, wherein step iia) is carried out by completely submerging the textile material or plastics material in the aqueous formulation either in a trough containing the aqueous formulation or passing the textile material
- 40

or plastics material through the aqueous formulation which is held between two horizontally oriented rollers.

- 5 19. The process as claimed in claim 17 or 18, wherein the insecticide and/or repellent is an insecticide and/or repellent as defined in claim 6.
- 10 20. The process as claimed in any of claims 17 to 19, wherein the aqueous formulation further comprises one or more ingredients selected from the group consisting of detergents, stabilizers, agents having UV-protecting properties, optical brighteners, spreading agents, anti-migrating agents, preservatives, foam-forming agents, wetting agents, thickeners, further biozides, plasticizers, adhesive agents, anti-soiling agents, fragrance, pigments and dyestuffs.
- 15 21. The process as claimed in any of claims 17 to 20, wherein the dying of the textile material or plastics material is carried out simultaneously with the impregnation of the textile material or plastics material, wherein an aqueous formulation is formed further comprising at least one dyestuff and/or at least one pigment.
- 20 22. A process for coating a textile material or plastics material by applying a composition comprising at least one insecticide and/or at least one repellent and at least one acrylic binder as defined in any of claims 1 to 5 to the textile material or plastics material.
- 25 23. The process as claimed in claim 22, wherein the composition further comprises one or more ingredients selected from the group consisting of detergents, stabilizers, agents having UV-protecting properties, optical brighteners, spreading agents, anti-migrating agents, preservatives, foam-forming agents, anti-soiling agents, wetting agents, thickeners, further biozides, plasticizers, adhesive agents, fragrance, pigments and dyestuffs.
- 30 24. The impregnated textile material or plastics material as claimed in any of claims 12 to 16, wherein the textile material or plastics material is a netting made from polyester, especially polyethylene terephthalate.
- 35 25. The insecticide or repellent composition as claimed in any of claims 1 to 11, additionally comprising a fixative agent.
- 40 26. The insecticide or repellent composition as claimed in claim 25, wherein the fixative agent is an isocyanurate comprising free isocyanate groups, preferably an isocyanurate based on alkylene diisocyanates having from 4 to 12 carbon atoms in the alkylene unit, like 1,12-dodecane diisocyanate, 2-ethyltetramethylene

diisocyanate-1,4, 2-methylpentamethylene diisocyanate-1,5, tetramethylene diisocyanate-1,4, lysinester diisocyanate (LDI), hexamethylene diisocyanate-1,6 (HMDI), cyclohexane-1,3-and/or-1,4-diisocyanate, 2,4-and 2,6-hexahydro-toluylene diisocyanate as well as the corresponding isomeric mixtures 4,4'-2,2'-and 2,4'-dicyclohexylmethane diisocyanate as well as the corresponding mixtures, 1-isocyanato-3,3,5-trimethyl-5-isocyanatomethyl cyclohexane (IPDI), 2,4-and/or 2,6-toluylene diisocyanate, 4,4'-, 2,4' and/or 2,2'-diphenylmethane diisocyanate (monomeric MDI), polyphenylpolymethylene polyisocyanate (polymeric MDI) and/or mixtures comprising at least 2 of the isocyanates mentioned before, more preferably the isocyanurates are based on hexamethylene diisocyanate-1,6 (HMDI);

wherein the isocyanurate is in a preferred embodiment hydrophilized with a polyalkylene oxide based on ethylene oxide and/or 1,2-propylene oxide, preferably polyethylene oxide.

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27. The insecticide or repellent composition as claimed in claim 26, wherein the fixative agent is an isocyanurate based on HMDI which is hydrophilized with a polyethylene oxide and which is dissolved in propylene carbonate (70 % by weight of HMDI in 30 % by weight of propylene carbonate), wherein the amount of free isocyanate groups is 11 to 12 % by weight, based on the amount of isocyanate used as starting material for the preparation of the isocyanurate.

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28. The insecticide or repellent composition as claimed in any of claims 25 to 27 comprising the following components, based on the solids content of the composition:

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a) 20 to 70 % by weight, preferably 25 to 65 % by weight, more preferably 30 to 65 % by weight of at least one insecticide and/or at least one repellent (component A), and

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b1) 29 to 72 % by weight, preferably 34 to 70 % by weight, more preferably 33 to 66 by weight of at least one acrylic binder (component B1) as defined above, comprising;

b1a) 10 to 90% by weight, preferably 15 to 80% by weight, more preferably 20 to 70% by weight based on the acrylic binder of n-butyl acrylate (component B1A);

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b1b) 10 to 90% by weight, preferably 12 to 85% by weight, more preferably 15 to 65% by weight based on the acrylic binder of at least one monomer of formula I (component B1B);

b1c) 1 to 5 % by weight based on the acrylic binder of at least one monomer of formula II (component B1C);

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- b1d) 0 to 5 % by weight, preferably 1 to 4 % by weight, more preferably 0.2 to 3% by weight based on the acrylic binder of at least one monomer of formula III (component B1D);
- 5 b1e) further monomers which are copolymerizable with the monomers mentioned (component B1E) above selected from
- b1e1) 0 to 30 % by weight, preferably 0 to 25 % by weight, more preferably 5 to 20 % by weight based on the acrylic binder of at least one polar monomer, preferably (meth)acrylic nitrile and/or methyl(meth)acrylate (component B1E1); and/or
- 10 b1e2) 0 to 40 % by weight, preferably 0 to 30 % by weight, more preferably 5 to 20 % by weight based on the acrylic binder of at least one non polar monomer, preferably styrene and/or  $\alpha$ -methylstyrene (component B1E1);
- 15 c) 1 to 8 % by weight, preferably 1 to 5 % by weight, more preferably 2 to 4 % by weight of at least one fixative agent (component C);
- wherein the sum of the components is 100 % by weight of solids content of the insecticide composition.
- 20 29. The process as claimed in any of claims 17 to 23, wherein the curing in step iv) is carried out at 60 to 170 °C.
30. The insecticide and/or repellent composition as claimed in claim 5, wherein the textile material or plastics material is a polyester netting material.
- 25 31. The insecticide and/or repellent composition as claimed in claim 5 or 30, wherein the component A is  $\alpha$ -Cypermethrin.
32. The insecticide and/or repellent composition as claimed in any of claims 5, 30 or 31, comprising:
- 30 a) 6.4 g/L to 16 g/L of  $\alpha$ -Cypermethrin as component A,
- b1) 10 g/L to 16.7 g/L of an acrylic binder as claimed in claim 5 as component B1,
- 35 c) 0 g/L to 0.83 g/L, preferably 0.5 g/L to 0.83 g/L of a fixative agent which is an isocyanurate based on HMDI which is hydrophilized with a polyethylene oxide and which is dissolved in propylene carbonate (70 % by weight of HMDI in 30 % by weight of propylene carbonate), wherein the amount of free isocyanate groups is 11 to 12 % by weight, based on the amount of
- 40 isocyanate used as starting material for the preparation of the isocyanurate, as component C,

and  
water.

33. An impregnated polyester netting material comprising
- 5      a) 0.32 to 1.6 % by weight of the weight of the polyester netting material of al-  
pha-Cypermethrin as component A,
- b1) 1 to 1.5 % weight of the weight of the polyester netting material of an acrylic  
binder as claimed in claim 5 as component B1.